

**PITX2 Antibody (N-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP14021a**

**Specification**

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**PITX2 Antibody (N-term) Blocking peptide - Product Information**

Primary Accession [Q99697](#)

**PITX2 Antibody (N-term) Blocking peptide - Additional Information**

**Gene ID** 5308

**Other Names**

Pituitary homeobox 2, ALL1-responsive protein ARP1, Homeobox protein PITX2, Paired-like homeodomain transcription factor 2, RIEG bicoid-related homeobox transcription factor, Solurshin, PITX2, ARP1, RGS, RIEG, RIEG1

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody AP14021a was selected from the N-term region of PITX2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**PITX2 Antibody (N-term) Blocking peptide - Protein Information**

**Name** PITX2 ([HGNC:9005](#))

**Function**

May play a role in myoblast differentiation. When unphosphorylated, associates with an ELAVL1-containing complex, which stabilizes cyclin mRNA and ensuring cell proliferation. Phosphorylation by AKT2 impairs this association, leading to CCND1 mRNA destabilization and progression towards differentiation.

**Cellular Location**

Nucleus. Cytoplasm {ECO:0000250|UniProtKB:P97474}

**PITX2 Antibody (N-term) Blocking peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

#### **PITX2 Antibody (N-term) Blocking peptide - Images**

#### **PITX2 Antibody (N-term) Blocking peptide - Background**

This gene encodes a member of the RIEG/PITX homeobox family, which is in the bicoid class of homeodomain proteins. The encoded protein acts as a transcription factor and regulates procollagen lysyl hydroxylase gene expression. This protein plays a role in the terminal differentiation of somatotroph and lactotroph cell phenotypes, is involved in the development of the eye, tooth and abdominal organs, and acts as a transcriptional regulator involved in basal and hormone-regulated activity of prolactin. Mutations in this gene are associated with Axenfeld-Rieger syndrome, iridogoniodysgenesis syndrome, and sporadic cases of Peters anomaly. A similar protein in other vertebrates is involved in the determination of left-right asymmetry during development. Alternatively spliced transcript variants encoding distinct isoforms have been described.

#### **PITX2 Antibody (N-term) Blocking peptide - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Banez, L.L., et al. J. Urol. 184(1):149-156(2010) Kalsi, G., et al. Hum. Mol. Genet. 19(12):2497-2506(2010) Ellinor, P.T., et al. Nat. Genet. 42(3):240-244(2010) Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :